

**Animal Enhancement Activity – ANM44 – Close structures to capture and retain rainfall for waterfowl and wading birds during winter**



**Enhancement Description**

This enhancement provides seasonal, shallow water habitat for migratory waterfowl and wading birds.

**Land Use Applicability**

Cropland

**Benefits**

Harvested and idled agricultural lands, notably those occurring within rice rotations, contain high densities of residual (i.e., waste) grain and natural seeds following harvest (Eadie et al. 2008, Marty 2013). Seed densities in harvested rice fields may rival those documented in intensively managed moist-soil units, especially in the Gulf Coast and Central Valley of California (Eadie et al. 2008, Marty 2013). When flooded to shallow depths during fall and winter, these agricultural fields provide ideal foraging habitat for myriad species of waterfowl and wading birds (Eadie et al. 2008). In addition, flooded conditions promote establishment of aquatic invertebrate populations, thus providing protein-rich food sources for shorebirds as well as waterfowl and wading birds (Elphick et al. 2010).

**Conditions Where Enhancement Applies**

This enhancement applies to crop land use acres with leveed fields capable of holding water at an average depth of 6 to 18 inches for the duration of the activity.

**Criteria**

1. Develop a wildlife habitat management plan for the targeted species suite.
2. Water control structures that affect applicable fields will be closed by mid-fall and remain closed through February 15. For fields where harvest of the crop occurs after mid-fall (e.g., ratoon rice), structures must be closed within 2 days following harvest and remain closed through February 15.
3. Applicable fields must be flooded to an average depth of 6 to 18 inches.
  - a. Water depths of 6 to 10 inches provide maximum benefit to targeted species.
  - b. Water depths shall not exceed 18 inches for any extended period.
4. Manipulation can occur prior to holding water. Manipulation should not affect greater than 80 percent of the field to which the activity is applied.

Note: This practice can be paired with Animal Enhancement Activity-ANM45-Manipulate vegetation on fields where rainfall is to be captured and retained and/or Animal Enhancement Activity-ANM46-Extend retention of captured rainfall to provide late winter habitat for migratory waterfowl and shorebirds. If not paired with Animal Enhancement Activity-ANM45-Manipulate vegetation on fields where rainfall is to be captured and retained, this practice can



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2015 Ranking Period 1

also be paired with Animal Enhancement Activity-ANM47-Shorebird habitat, late season shallow water with manipulation or Animal Enhancement Activity-ANM48-Shorebird habitat, extended late season shallow water with manipulation.

### **Adoption Requirements**

This enhancement is considered adopted on the land use acre when water control structures affecting subject fields are closed by mid-fall, or within 2 days after harvest, if the harvest occurs after mid-fall.

### **Documentation Requirements**

1. Copy of the wildlife habitat management plan for the targeted species suite
2. Crops grown and the harvest date for the crops grown on the applicable acres
3. Date the water control structure was closed
4. Date when the water control structures were opened
5. Digital photographs of the condition of the structures and the habitat provided

### **References**

Eadie, J. M., C. S. Elphick, K. J. Reinecke and M. R. Miller. 2008. Wildlife values of North American ricelands. Pages 7-90 in *Conservation in Ricelands of North America* (S. W. Manley, Ed.). The Rice Foundation, Stuttgart, Arkansas.

Elphick, C. S., O. Taft, and P. M. Lourenco. 2010. Management of rice fields for birds during the non-growing season. *Waterbirds* 33:181-192.

Marty, J. R. 2013. Seed and waterbird abundances in ricelands in the Gulf Coast Prairies of Louisiana and Texas. Thesis, Mississippi State University, Mississippi State, MS, USA.